THE FACE OF POWER

Wilhelm K. Klatt, Francine von Weissenfluh, & Janek S. Lobmaier

University of Bern, Department of Psychology

Meeting of the European Human Behaviour and Evolution Association, London, UK, April 5-8, 2016

RESEARCH QUESTIONS

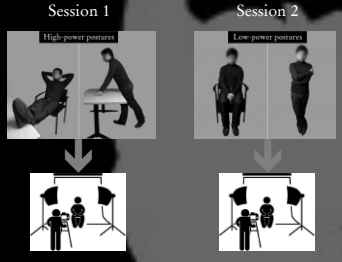
- Do specific postures which are associated with power have a bearing on the participant's facial appearance?
- Are others able to distinguish faces after "high-power posing" from faces after "low-power posing"?

INTRODUCTION

- In humans and other animals, open, expansive postures (compared to contracted postures) are evolutionary developed expressions of power[1]
- These postures have been shown to cause neuroendocrine and behavioural changes[2]

METHOD

- 16 models (8 women, M = 23.1 years, SD = 3.1) adopted two different high-power and two different low-power postures
- Postures were held for 2 minutes each (power-posing sessions were performed on two consecutive days)
- Postures were described verbally and were demonstrated with images taken from Carney et al. (2010)[2]



The order of sessions was counterbalanced

- The models' faces were photographed 4-5 minutes after each power posture

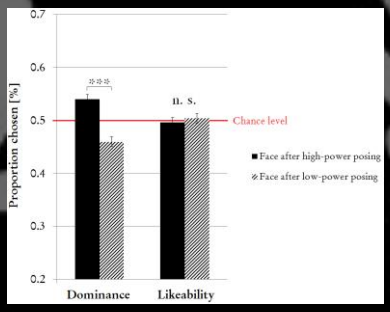
- Saliva samples were taken before (baseline) and 17 minutes after each power posture (cf. Carney et al., 2010[2])
- High-power and low-power photographs of each model were paired
- An independent sample of 100 participants (49 women, M = 23.4 years, SD = 4.8) were asked to pick the more dominant and the more likeable version of each face pair (2-alternative forced choice)

CONCLUSION

- Body postures influence facial appearance
- After adopting a posture associated with high power you look more dominant!

RESULTS

- Facial pictures taken after high-power posing were chosen significantly more often as being more dominant looking than pictures taken after low-power posing (M = .54, SD = .094, t = 4.24, p < .001)
- There was no preference when asked to choose the more likeable photograph (50% chance level, M = .504, SD = .091, t = .48, p = .63)



- Hormonal analysis of saliva samples revealed only an effect of cortisol: High-power posing resulted in a decrease in cortisol compared to baseline (t = 2.59, p = .017)
- Facial width-to-height ratio (fWHR) as a marker of dominance[3] did not differ between faces after high-power and low-power posing (p = .36)
- A further independent sample of 17 participants (15 women, M = 24.8 years, SD = 3.0) rated each photograph for head tilt; posture of head is not the reason for higher dominance ratings after high-power posing (all p's > .15)

DISCUSSION

- Faces after high-power posing are perceived as more dominant looking than the same faces after low-power posing
- The underlying mechanism remains unclear (at least it seems not to rely on testosterone, or fWHR, or head tilt)
- Maybe postures influence facial muscle activity?
- This finding may have implications for everyday life, for instance when a dominant appearance is needed

Contact information: wilhelm.klatt@psy.unibe.ch

This research was funded by SNF Project No. PP00P1 139072

REFERENCES

1. de Waal, F. (1998). *Chimpanzee politics: Power and sex among apes.* Baltimore, MD: Johns Hopkins University Press.
2. Carney, D. R., Cuddy, A. J. C., & Yap, A. J. (2010). Power Posing: Brief Nonverbal Displays Affect Neuroendocrine Levels and Risk Tolerance. *Psychological Science, 21*(10), 1363-1368.
3. Alrajih, S., & Ward, J. (2014). Increased facial width-to-height ratio and perceived dominance in the faces of the UK's leading business leaders. *British Journal of Psychology, 105*, 153-161. doi: 10.1111/bjop.12035